

CLAIMS

1. A method comprising the steps of:

receiving a first signal from a print engine indicating initiation of transmission of print

data;

transmitting a shorter signal to a printer ASIC, in response to receiving a signal;

receiving a first line of data to be printed from the printer ASIC;

receiving a second signal from the print engine;

transmitting a second shorter signal to a printer ASIC, in response to receiving a signal;

receiving a second line of data to be printed from the printer ASIC; and

transmitting the first line of data to the print engine.

2. An apparatus comprising:

a controller/processor unit communicatively coupled to the data embedding application and to the network interface;

a data memory communicatively coupled to the controller/processor unit;

a printer ASIC communicatively coupled to the controller/processor unit;

a bandwidth booster communicatively coupled to the printer ASIC and to the controller/processor unit;

a print engine communicatively coupled to the bandwidth booster; and

a printhead communicatively coupled to the print engine.

3. The apparatus of claim 2, wherein the bandwidth booster comprises:

an ASIC interface;

a dual port FIFO (first in first out), communicatively coupled to the ASIC interface;

an engine interface, communicatively coupled to the ASIC interface and to the

5 FIFO; and

an external clock, communicatively coupled to the ASIC interface, the FIFO, and
the engine interface.

4. A printing system comprising:

10 at least one networked device;

a network interface, communicatively coupled to the at least one networked
device;

a controller/processor unit communicatively coupled to the data embedding
application and to the network interface;

15 a data memory communicatively coupled to the controller/processor unit;

a printer ASIC communicatively coupled to the controller/processor unit;

a bandwidth booster communicatively coupled to the printer ASIC and to the
controller/processor unit;

a print engine communicatively coupled to the bandwidth booster; and

20 a printhead communicatively coupled to the print engine.

5. The system of claim 4, wherein the bandwidth booster comprises:

an ASIC interface;

a dual port FIFO (first in first out), communicatively coupled to the ASIC interface;

an engine interface, communicatively coupled to the ASIC interface and to the

FIFO; and

an external clock, communicatively coupled to the ASIC interface, the FIFO, and the engine interface.

6. A computer readable medium including computer instructions for driving a

printer, the computer instructions comprising instructions for:

receiving a first signal from a print engine indicating initiation of transmission of print data;

transmitting a shorter signal to a printer ASIC, in response to receiving a signal;

receiving a first line of data to be printed from the printer ASIC;

receiving a second signal from the print engine;

transmitting a second shorter signal to a printer ASIC, in response to receiving a signal;

receiving a second line of data to be printed from the printer ASIC; and

transmitting the first line of data to the print engine.